

# REPORT DOCUMENTATION PAGE

*Form Approved  
OMB No. 0704-0188*

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. **PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.**

<b>1. REPORT DATE (DD-MM-YYYY)</b> 04-05-2011		<b>2. REPORT TYPE</b> FINAL		<b>3. DATES COVERED (From - To)</b>	
<b>4. TITLE AND SUBTITLE</b> Salvation From Above: No-Fly Zones and Civilian Protection				<b>5a. CONTRACT NUMBER</b>	
				<b>5b. GRANT NUMBER</b>	
				<b>5c. PROGRAM ELEMENT NUMBER</b>	
<b>6. AUTHOR(S)</b>  Matthew A. Renner  Paper Advisor (if Any): Mark Seaman				<b>5d. PROJECT NUMBER</b>	
				<b>5e. TASK NUMBER</b>	
				<b>5f. WORK UNIT NUMBER</b>	
<b>7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)</b>  Joint Military Operations Department Naval War College 686 Cushing Road Newport, RI 02841-1207				<b>8. PERFORMING ORGANIZATION REPORT NUMBER</b>	
<b>9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)</b>				<b>10. SPONSOR/MONITOR'S ACRONYM(S)</b>	
				<b>11. SPONSOR/MONITOR'S REPORT NUMBER(S)</b>	
<b>12. DISTRIBUTION / AVAILABILITY STATEMENT</b> Distribution is unlimited.					
<b>13. SUPPLEMENTARY NOTES</b> A paper submitted to the Naval War College faculty in partial satisfaction of the requirements of the Joint Military Operations Department. The contents of this paper reflect my own personal views and are not necessarily endorsed by the NWC or the Department of the Navy.					
<b>14. ABSTRACT</b>  The current Western military operation in Libya is based upon a flawed and unproven hypothesis; that a no-fly zone can prevent a humanitarian crisis. Though a no-fly zone may enable other military operations or the use of other instruments of national power, a no-fly is severely limited in its ability to protect civilians from government repression. This is due in part to the risk of civilian casualties, environmental factors, and the inherent limitations of airpower. The ways and means are insufficient to accomplish the desired ends. In this paper, the author defines the concepts involved in establishing and enforcing a no-fly zone and investigates the theory behind them. By drawing lessons from past no-fly zones in Iraq and Bosnia, the author provides insight into their utility, limitations, and effectiveness. Finally, the author draws conclusions and presents recommendations regarding the future use of no-fly zones.					
<b>15. SUBJECT TERMS</b> No-fly zones, Iraq, Bosnia, Libya					
<b>16. SECURITY CLASSIFICATION OF:</b>		<b>17. LIMITATION OF ABSTRACT</b>	<b>18. NUMBER OF PAGES</b>	<b>19a. NAME OF RESPONSIBLE PERSON</b> Chairman, JMO Dept	
a. REPORT UNCLASSIFIED	b. ABSTRACT UNCLASSIFIED			c. THIS PAGE UNCLASSIFIED	<b>19b. TELEPHONE NUMBER</b> (include area code) 401-841-3556
22					

NAVAL WAR COLLEGE  
Newport, R.I.

**SALVATION FROM ABOVE: NO-FLY ZONES AND CIVILIAN PROTECTION**

by

**Matthew A. Renner**

**Lieutenant Commander, United States Navy**

**A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.**

**The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.**

**Signature:** \_\_\_\_\_

**4 May 2011**

## **Contents**

Introduction	1
Background	2
Discussion/Analysis	5
Counter-Argument	12
Conclusions and Recommendations	15
Bibliography	17

## **Abstract**

The current Western military operation in Libya is based upon a flawed and unproven hypothesis; that a no-fly zone can prevent a humanitarian crisis. Though a no-fly zone may enable other military operations or the use of other instruments of national power, a no-fly is severely limited in its ability to protect civilians from government repression. This is due in part to the risk of civilian casualties, environmental factors, and the inherent limitations of airpower. The ways and means are insufficient to accomplish the desired ends. In this paper, the author defines the concepts involved in establishing and enforcing a no-fly zone and investigates the theory behind them. By drawing lessons from past no-fly zones in Iraq and Bosnia, the author provides insight into their utility, limitations, and effectiveness. Finally, the author draws conclusions and presents recommendations regarding the future use of no-fly zones.

## INTRODUCTION

Any future defense secretary who advises the president to again send a big American land army into Asia or into the Middle East or Africa should have his head examined.

-United States Secretary of Defense Robert M. Gates

As the Western powers emerge from the challenges of Afghanistan and Iraq in the last decade, it seems unlikely that political and military leaders will commit ground forces to resolve conflicts around the world. Yet these conflicts will almost certainly continue and the calls for Western assistance and military intervention will likely continue as well. The reluctance of Western leaders to use ground troops leaves the use of airpower as an attractive alternative. As General Wesley Clark wrote in 2002, “political leaders conditioned by the twentieth century’s profligate losses of military manpower tend to opt first to use airpower.”<sup>1</sup>

The current situation in Libya demonstrates this well. As government forces under Muammar Qaddafi violently put down anti-government protests, many called for Western military intervention to protect civilians in Libya. Yet wary and resource limited from nearly a decade of ground commitments in Afghanistan and Iraq, this intervention came in the form of airpower, specifically a no-fly zone. No-fly zones were first used in Iraq and Bosnia in the 1990s. In each case the stated purpose of the no-fly zone was to protect civilians on the ground, though there is considerable confusion about their objectives and effectiveness.<sup>2</sup> Similarly the no-fly zone established in Libya by a United States (U.S.) led coalition is

---

1. Wesley K. Clark, *Waging Modern War* (New York, New York: PublicAffairs, 2001), 10.

2. Alexander Benard, “Lessons from Iraq and Bosnia on the Theory and Practice on No-fly Zones,” *The Journal of Strategic Studies*, September 2004, Vol. 27, Iss. 3, 454, <http://www.web.esbscohost.com/> (accessed 3 March 2011).

designed “to stop the regime’s attacks from the air and . . . to protect the Libyan people.”<sup>3</sup>

Unfortunately, despite the best of intentions, this objective is based upon a flawed and unproven hypothesis; that no-fly zones can protect civilians. In this case, the ways and means available are insufficient to accomplish the desired ends. Due to the risk of civilian casualties, environmental factors, and the inherent limitations of airpower, no-fly zones are not capable of protecting civilians from government repression.

For the purposes of this paper, all missions associated with establishing and enforcing a no-fly zone, including those to attack ground targets are considered to be part of a no-fly zone operation. Whether this is considered one operation or two separate operations is immaterial when discussing their effectiveness. Similarly, no-fly zones are discussed as they have been used historically, in the context of peace support operations, which are defined as “encompassing any peacemaking or peacekeeping operation.”<sup>4</sup> The term civilian is used to describe those not in the military forces of an established government. Certainly this can get a bit complicated as some of these “civilians” are taking part in armed resistance against their government.

## **BACKGROUND**

The term “no-fly zone” can be misleading. It has been used to describe a number of different potential operations. In the simplest terms a no-fly zone is an operation designed to prevent one nation’s aircraft from flying over a given area. Essentially, if aircraft violate the no-fly zone they risk being shot down. Historically no-fly zones have involved an outside

---

3 . Barack H. Obama, President of the United States (Address to the Nation on Libya, National Defense University, Washington D.C., 28 March 2011). <http://www.whitehouse.gov/> (accessed 1 April 2011).

4 . Benard, 455.

power or coalition using overwhelming air superiority to restrict flight operations, primarily military flights, over a designated area. Additionally, no-fly zones have been used in the past to provide air cover for ground peacekeeping forces, monitor military activities on the ground, and have recently been expanded to include airstrikes against enemy ground forces or other targets. What differentiates a no-fly zone operation from an air war or bombing campaign is that its purpose is to “discourage an internal conflict or humanitarian crisis,”<sup>5</sup> vice win a military conflict.

After Operation DESERT STORM, the Kurdish minority in portions of northern Iraq rose up against Saddam Hussein’s Baath regime. Hussein responded by launching a military operation on 22 March 1991.<sup>6</sup> United Nations (UN) Security Council Resolution 688 was passed on 5 April 1991 and called on Iraq to cease its persecution of civilians, including the Kurds.<sup>7</sup> In May, the United States and its coalition partners began Operation PROVIDE COMFORT, an international peacekeeping effort which supplemented ground forces with a no-fly zone.<sup>8</sup> This U.S. led no-fly zone covered all Iraqi aircraft flying north of the 36<sup>th</sup> parallel, in addition to an exclusion zone to deter Iraqi ground attacks against the Kurds. In combination with the efforts of Kurdish rebels and U.S. ground forces, the operation resulted in the withdrawal of Iraqi forces in October 1991.<sup>9</sup> On 1 January 1997, Operation NORTHERN WATCH replaced Operation PROVIDE COMFORT. The overall military presence was reduced and the mission shifted from providing humanitarian cover to the

---

5. Joshua E. Keating, “Do No-Fly Zones Work?” *Foreign Policy*, 28 February 2011, <http://www.foreignpolicy.com/> (accessed 15 March 2011).

6. Benard, 463.

7. Michael A. Knights, *Cradle of Conflict: Iraq and the Birth of Modern U.S. Military Power* (Annapolis, MD: Naval Institute Press, 2005), 123.

8. Benard, 463.

9. Michael A. Knights, “Policy Watch #1765, Slippery Slope: Libya and the Lessons of Previous No-Fly Zones,” *The Washington Institute for Near East Policy*, 25 February 2011, <http://www.washingtoninstitute.org/> (accessed 3 March 2011).

Kurds to ensuring Iraqi compliance with UN Security Council Resolutions. Operation NORTHERN WATCH continued until the U.S. led invasion of Iraq in March of 2003.<sup>10</sup>

In August of 1992, in response to Iraq's continued attacks against the Shiites in southern Iraq, the United States and its coalition partners began Operation SOUTHERN WATCH.<sup>11</sup> Based upon Iraqi violations of UN Security Council Resolution 688, which demanded that Saddam Hussein end his repression of the Iraqi people, a no-fly zone was established for all Iraqi aircraft south of the 32<sup>nd</sup> parallel.<sup>12</sup> Over the next few years the no-fly zone was expanded to the 33<sup>rd</sup> parallel and a “no-drive zone”, which forbade Iraqi military reinforcements south of the 33<sup>rd</sup> parallel, was also added. As in the north, Operation SOUTHERN WATCH continued until the U.S. led invasion in 2003.<sup>13</sup>

In March of 1992, Bosnia declared its independence from what had been Yugoslavia. This resulted in Muslims and Croats in Bosnia becoming the targets of Serbian brutality. On 31 March 1993, the UN Security Council passed Resolution 816, which authorized the enforcement of a no-fly zone over Bosnia-Herzegovina. The purpose of the no-fly zone was to provide air cover for the UN peacekeeping forces which had been on the ground since 1992. The North Atlantic Treaty Organization (NATO) led the operation, dubbed Operation DENY FLIGHT. Sorties began in April of 1993 and continued until December of 1995; one month after a ceasefire was signed at the Dayton Peace Accords.<sup>14</sup>

---

10. Benard, 464.

11. Knights, *Cradle of Conflict*, 128-129.

12. “No-Fly Zone in Southern Iraq,” *U.S. Department of State Dispatch*, 31 August 1992, Vol. 3, Iss. 35, 682, <http://proquest.umi.com/> (accessed 3 March 2011).

13. Knights, “Slippery Slope.”

14. Benard, 469-470.

Most recently, in response to Libyan leader Muammar Qaddafi's violent attempts to put down a growing rebellion in that country, the UN Security Council passed Resolution 1973 on 17 March 2011. The resolution authorized a no-fly zone over Libya and "all necessary measures to protect civilians under threat of attack in the country."<sup>15</sup> Shortly thereafter, an international coalition, led initially by the United States and later by NATO, began Operation ODYSSEY DAWN, which established a no-fly zone over Libya and initiated airstrikes against Libyan ground forces in order to protect civilians.<sup>16</sup>

## **DISCUSSION / ANALYSIS**

Analyzing the effectiveness of the no-fly zones in Iraq and Bosnia is challenging. No-fly zones have been successful in preventing enemy aircraft from flying in the airspace they were designed to restrict. As such they prevented enemy forces from attacking and killing civilians from the air. Yet in each case they failed to prevent attacks by ground forces. There are a number of reasons for this. First, though no-fly zones can effectively prevent attacks from the air, assuming the enemy still has the desire to use force against its people, they will find other means. Next, no-fly zone operations have tended to focus on monitoring the situation on the ground and protecting friendly forces in the air and on the ground, not at attacking ground forces that threaten civilians. Compounding these problems are the significant limitations to using airpower alone to strike ground-based threats to civilians. In order to fully protect civilians from government repression, the no-fly zone would require a level of persistence and coordination that simply cannot be achieved without

---

15. United Nations, Security Council, "The Situation in Libya," S/Res/1973, 2011, <http://www.un.org/documents> (accessed 15 April 2011).

16. Andre de Nesnera, "No-Fly Zone Established Over Libya, but Civilian Attacks Continue," *Voice of America News*, 24 March 2011, <http://proquest.umi.com/> (accessed 13 April 2011).

forces on the ground. Lastly, no-fly zones are not an end to themselves; they simply set conditions and shape the situation on the ground.

Though the no-fly zones in Iraq and Bosnia were generally effective at preventing the enemy from flying, they did little to prevent ground based attacks on civilians. There are a number of reasons why this was the case, however the fact that ground attacks were likely to happen should hardly have been surprising. While the no-fly zones took away the air power of Saddam Hussein in Iraq and the Serbs in Bosnia, they did nothing to take away their ground forces. Not surprisingly when these forces were denied the use of aircraft to attack their people, they turned to tanks, artillery, and infantry to continue the fight. Certainly the Western powers enforcing the no-fly zones were aware that the Iraqis and the Serbs possessed such forces, unfortunately the no-fly zones were simply unable to protect the civilians from these attacks.

In northern Iraq, the inability of no-fly zone aircraft to attack ground forces resulted in the deaths of many of the people the operation was officially designed to protect. In the summer of 1996, the two main Kurdish factions, the Kurdish Democratic Party and the Patriotic Union of Kurdistan (PUK) were engaged in open hostilities.<sup>17</sup> Despite warnings from the United States not to intervene, Saddam Hussein sent four Republican Guard divisions north to attack the PUK with artillery and tanks. Saddam's forces killed hundreds before withdrawing. The aircraft overhead enforcing the no-fly zone did nothing. It certainly wasn't that the United States didn't know that the attack was coming. According to scholar Michael Knights, in his book *Cradle of Conflict*, the Central Intelligence Agency

---

17. Benard, 465.

presence in northern Iraq was aware of the troop buildup.<sup>18</sup> Part of the problem was that the no-fly zone in northern Iraq did not explicitly prohibit Saddam from sending troops north of the thirty-sixth parallel, just aircraft. Additionally, the no-fly zone aircraft were only allowed to strike Iraqi ground targets when the aircraft themselves were threatened, not when the Kurds on the ground were threatened. Interestingly, it was in response to the Iraqi incursion in the north that the no-fly zone in the south was expanded to the 33<sup>rd</sup> parallel. Additionally, the United States responded to the Iraqi incursion with Operation DESERT STRIKE, a series of cruise missile strikes and airstrikes, aimed not at the Iraqi forces in the north, but at the Iraqi Integrated Air Defense System (IADS) in the south.<sup>19</sup>

In Operation SOUTHERN WATCH, though the impetus for the no-fly zone was Saddam Hussein's renewed attacks on Shiites with fixed wing aircraft, as Michael Knights of the Washington Institute noted, "the zones never truly protected civilians in the south, because the regime's ground forces were still capable of destroying communities with artillery and other means."<sup>20</sup> Additionally, throughout the late 1990s, the Iraqi government actively persecuted the Shiites in the south. They drained the marshes that had supported their villages for centuries, which combined with artillery attacks, reduced the Shiite population in the marsh region by over 75 percent.<sup>21</sup>

The focus of effort in Operation SOUTHERN WATCH was clearly not to protect the Shiites on the ground. The operations themselves focused on using reconnaissance planes to monitor troop and equipment movements so that the United States could be aware of any

---

18. Knights, *Cradle of Conflict*, 154-156.

19. Ibid., 156-166.

20. Knights, "Slippery Slope."

21. Phillip Gibbons, "Policy Watch #632, U.S. No-Fly Zones in Iraq: To What End?" *The Washington Institute for Near East Policy*, 1 July 2002, <http://www.washingtoninstitute.org/> (accessed 3 March 2011).

buildups that might pose a threat to U.S. forces, the Shiites, or Iraq's neighbors.<sup>22</sup> When airstrikes were carried out, usually in response to Iraqi aggression, the targets were Iraq's IADS. As one Shiite said at the time, "when we saw the allied jets ignore the guns that were killing us and hit only the missiles that threatened their planes . . . we knew we had been abandoned."<sup>23</sup>

In Bosnia, NATO credited Operation DENY FLIGHT with removing the Serbian airpower, but as Joshua Keating wrote in *Foreign Affairs*, "it did little to prevent the worst abuses of the conflict, including the 1995 Srebrenica massacre."<sup>24</sup> In July of 1995, Bosnian Serbs overran UN peacekeepers guarding the village of Srebrenica and systematically killed between 7,000 and 8,000 civilians.<sup>25</sup> Although some of the blame for this incident can be placed on the ineffectiveness and limited authority of the UN ground forces, the NATO aircraft enforcing the no-fly zone did nothing to stop it.

In order to engage ground targets during Operation DENY FLIGHT, NATO aircraft required authorization from both NATO and the UN, a situation commonly referred to as dual-key approval. Often by the time approval could be granted, the situation on the ground had changed such that the strike was no longer necessary or desired. In the case of the Srebrenica incident, the UN did not approve the bombing in time for it to be effective.<sup>26</sup> When airstrikes were approved by both NATO and the UN in time to be carried out, the

---

22. Benard, 464.

23. Knights, "Slippery Slope."

24. Keating, "Do No-Fly Zones Work?"

25. Benard, 471.

26. Ibid., 471.

targets were threats to either the UN forces on the ground or the aircraft patrolling the no-fly zone itself, not to the civilians on the ground.<sup>27</sup>

Certainly, the no-fly zones in Iraq and Bosnia did not prevent enemy ground forces from attacking civilians. While this is due in part to the design of those no-fly zones, specifically they did not have the ability or authority to quickly and effectively attack ground based threats to civilians, much of this is due to the inherent limitations of no-fly zones themselves. To protect civilians from ground-based threats, a no-fly zone would require a number of conditions that are simply unrealistic. The no-fly zone has to be able to detect threats to civilians whenever and wherever they occur. Next, aircraft have to be available to strike those targets quickly. Unless the aircraft are based at sea, the nations in the region that are hosting the no-fly zone aircraft have to be willing to allow those aircraft to be used to attack forces on the ground. Lastly, the aircraft conducting the strikes must have the ability to find their targets and hit them, without the help of forces on the ground.

Detecting threats to civilians on the ground, using solely airpower, will require sorties to be flown virtually around the clock.<sup>28</sup> Intelligence, surveillance, and reconnaissance aircraft will be required to constantly monitor the situation on the ground and command and control aircraft will be required to coordinate the strikes. Additionally, the strike aircraft themselves will have to be available quickly. Though it is possible that some of the aircraft enforcing the no-fly zone could also conduct air-to-ground strikes, this would require dual

---

27. Benard, 470.

28. Ibid., 457.

role aircraft with specific weapons loads be used to enforce the no-fly zone. This represents a level of effort and persistence that no previous no-fly zone has been able to accomplish.<sup>29</sup>

Another limitation on protecting civilians with no-fly zones in the past has been securing host nation approval to launch strikes from their territory. Much of the reason that the aircraft enforcing the no-fly zone in northern Iraq did not attack Iraqi forces in 1996 was that Turkey, where the aircraft enforcing the no-fly zone were based, would not allow it. In fact, this was also the reason why Operation DESERT STRIKE was carried out against targets in the south vice the north of Iraq.<sup>30</sup> The requirement to have host nation approval to launch strikes can be somewhat mitigated by launching the strikes from sea, such as from aircraft carriers, but it further limits the strike assets available and thus one's ability to provide constant coverage of the no-fly zone.

In order to successfully carry out an airstrike, the aircraft must be able to find and attack the targets, without any forces on the ground to assist them. Finding, positively identifying, and attacking ground target using airpower alone, can be fairly challenging in good weather over open terrain. In an urban environment or over mountainous or jungle terrain it is nearly impossible. Additionally, airpower alone will only be effective when the warring factions on the ground are relatively identifiable and distinguishable from one another, which is quite unlikely against guerilla fighters or in an insurgency.<sup>31</sup> The Srebrenica Massacre in Bosnia demonstrates just how difficult this can be. Even if NATO aircraft had been called upon to assist and authority could have been granted in a timely manner, they likely could not have prevented the atrocities. The small number of dispersed

---

29. Benard, 464, 470.

30. Knights, *Cradle of Conflict*, 156.

31. Benard, 457.

soldiers and their well hidden equipment made difficult targets for airstrikes.<sup>32</sup> Additionally, throughout Bosnia “the warring parties could not be easily distinguished from one another.”<sup>33</sup>

In addition to having the ability to use the no-fly zone aircraft to attack ground forces, the commanders, and the pilots of the individual aircraft, must have the clear authority to do so. This requires clearly written guidance from leadership, an efficient authorization process, effective command and control, and understandable rules of engagement. The failure to provide such a system led to the failure of air assets to protect civilians in both Iraq and Bosnia, most notably in the Srebrenica massacre.<sup>34</sup>

Much of the purpose behind the no-fly zones in Iraq and Bosnia was to demonstrate Western resolve, in hopes of deterring continued aggression. The problem was that the no-fly zones did not have the force behind them to convert deterrence into prevention when challenged. The bottom line is that no-fly zones have deterrent value initially, but if they lack the authority to back it up when tested, they lose their ability to deter aggression. The Iraqi incursion into northern Iraq in 1996 and the resulting U.S. actions, demonstrates the failures of no-fly zone deterrence. Prior to 1996, Saddam Hussein believed that the enforcement of the no-fly zone would be more vigorous than it was. The events of that year showed Hussein that the stated mission, to protect the minorities in the north and south of Iraq, was not backed up by the authority given to the pilots. The fact that the coalition did not prevent his aggression but rather responded with Operation DESERT STRIKE, taught Hussein to fear retribution rather than the no-fly zone itself. As Alexander Benard wrote in

---

32. Benard, 473.

33. Ibid., 474.

34. Ibid., 471.

*The Journal of Strategic Studies*, from that point on, “the no-fly zone ceased to be of much use.”<sup>35</sup>

Importantly, like deterrence, no-fly zones “are a means to an end, not an end in and of themselves.”<sup>36</sup> No-fly zones do not work effectively by themselves. They may be able to set the conditions to protect civilians, or even potentially end a conflict, but they cannot do it by themselves. The no-fly zones in Iraq never stopped Saddam Hussein’s persecution of his people. They never compelled him to comply with UN Security Council Resolutions or step down from power. In the end it required a U.S. led invasion to accomplish those objectives.<sup>37</sup> In Bosnia it required significant diplomatic efforts and a sustained bombing operation, Operation DELIBERATE FORCE, to bring an end to the conflict.<sup>38</sup>

## COUNTER-ARGUMENT

The primary counter-argument against the premise that no-fly zones and airpower alone cannot protect civilians from government repression is that the no-fly zones of the past have not been properly implemented. In short, they did not give the commanders or the pilots in the aircraft, sufficient authority.<sup>39</sup> This is the basic argument put forth by Alexander Benard in his article *Lessons from Iraq and Bosnia on the Theory and Practice of No-fly Zones*. In his article Benard concludes that no-fly zones can be very effective if implemented properly, but that in the case of both Iraq and Bosnia, political and military leaders did not “give clear authority to engage the enemy.”<sup>40</sup> In other words if we were to remove the

---

35. Benard, 466.

36. Ibid., 462.

37. Ibid., 469.

38. Ibid., 470.

39. Ibid., 474.

40. Ibid., 462.

handcuffs, no-fly zones could effectively protect civilians and accomplish their objectives.

In what Benard terms “air occupation” operations, a no-fly zone would be used as an alternative to putting troops on the ground. He argues that these operations could accomplish many of the same things as using ground troops with precision munitions and “sheer intimidation.”<sup>41</sup> Additionally he states that such operations would be “less risky than actually maintaining troops on the ground.”<sup>42</sup> However as we have already seen this could present significant challenges.

As Benard points out, enforcing an air occupation would require a nearly constant presence in order to find and strike targets. Achieving this would be extremely costly. The no-fly zones in Iraq resulted in an average of 34,000 sorties per year and cost over \$1 billion annually to enforce and neither of those no-fly zones provided 24 hour coverage.<sup>43</sup> With the number of assets required to enforce an air occupation, there is also an opportunity cost associated with such a no-fly zone. Aircraft engaged in such an operation are not available for operations elsewhere and a prolonged commitment to such a no-fly zone will begin to have negative impacts on future training and readiness, as the United States Air Force found during the no-fly zone enforcement of the 1990s.<sup>44</sup>

Though Benard does admit that “not everything that can be accomplished by ground troops can also be achieved solely by airpower,”<sup>45</sup> what airpower alone can accomplish against ground forces is very limited in many environments and circumstances. As

---

41. Benard, 457.

42. Ibid., 457.

43. Michael A. Knights, “Policy Watch #730, The Long View of No-Fly and No-Augmentation Zones,” *The Washington Institute for Near East Policy*, 24 March 2003, <http://www.washingtoninstitute.org/> (accessed 3 March 2011); Benard, 459; Gibbons.

44. Benard, 459.

45. Ibid., 457.

demonstrated previously, in order for airpower to effectively target ground forces, the aircraft have to be able to find the enemy. This can prove very difficult in poor weather or in complex terrain, such as an urban environment. Though it may be possible to attack massing troops in open terrain before they get to the cities, depending upon the nature of the enemy, these opportunities could be few. An intelligent enemy will quickly figure out that if he can hide or disguise his forces on the ground, the no-fly zone aircraft will have trouble finding and attacking his forces. Additionally, without friendly forces on the ground to find and identify targets and then coordinate and authorize attacks against them, the risks of civilian casualties and collateral damage, particularly in an urban environment is significant.

Though it is too early to draw any final conclusions, the current no-fly zone operation in Libya has already demonstrated many of the limitations and problems with using airpower alone to protect civilians. Initially U.S. and NATO aircraft had significant success finding and destroying Qaddafi's tanks, artillery, and military vehicles in the open desert outside the cities. However, bad weather and evolving tactics by the forces loyal to Qaddafi soon limited the effectiveness of the no-fly zone. Qaddafi's forces began "hiding their troops and weaponry among urban populations and traveling in pickup trucks and SUVs rather than military vehicles, making them extremely difficult to target."<sup>46</sup> Another report found that although the airstrikes had destroyed many of the pro-Qaddafi forces' armored vehicles, his forces soon found that by using deception and evasion, such as moving in small units using civilian cars and trucks, they could evade airstrikes.<sup>47</sup> Airstrikes on Qaddafi's positions outside of the cities only forced his loyalists deeper into the cities, where the airstrikes "had

---

46. Steven Erlanger, "NATO says its hands are tied in air war," *The International Herald Tribune*, 8 April 2011, <http://www.lexisnexis.com/> (accessed 13 April 2011).

47. C. J. Chivers, "As Qaddafi's Troops Move In, a Seesaw Battle for a Rebel City," *The New York Times*, 10 April 2011, <http://www.lexisnexis.com/> (accessed 13 April 2011).

little effect on the fierce, close-quarters urban combat” and “where NATO warplanes were reluctant to strike because of the risk of civilian casualties.”<sup>48</sup> However, this reluctance did not prevent friendly casualties. The difficulty of identifying enemy targets and coordinating with the Libyan rebels has thus far led to two cases of friendly fire, where NATO aircraft bombed friendly rebel forces which they mistook for enemy units.<sup>49</sup> All of this serves to demonstrate just how difficult it is to protect civilians using no-fly zones and airpower alone, even when many of the restrictions of past operations are removed.

## CONCLUSIONS AND RECOMMENDATIONS

Historically, no-fly zones have not been able to protect civilians from government repression. Simply put, no-fly zones alone, specifically without any forces on the ground, are not capable of achieving such an objective. Additionally it is important to understand that establishing a no-fly zone is effectively an act of war, not a humanitarian effort. As scholar Michael Knights writes in his article *Slippery Slope: Libya and the Lessons of Previous No-Fly Zones*, “within the context of antigovernment uprisings, no-fly zones effectively transform the foreign power into a combatant – presenting them as purely humanitarian in nature stretches credibility.”<sup>50</sup> The problem is that this is exactly what the United States is currently trying to accomplish in Libya. The U.S. and NATO led coalition have established a no-fly zone and conducted airstrikes to protect Libyan civilians and prevent a humanitarian crisis, with the stated limitation of not putting ground troops into Libya.<sup>51</sup> This places military planners in a very difficult position, where the ways and means available cannot

---

48. Liz Sly, “Urban combat still rages on forgotten Libyan front,” *The Washington Post*, 29 March 2011, <http://www.lexisnexis.com/> (accessed 13 April 2011).

49. C. J. Chivers and Kareem Fahim, “Libyan Rebels’ Convoy Mistakenly Hit by NATO, Rebel General Says,” *The New York Times*, 8 April 2011, <http://www.lexisnexis.com/> (accessed 13 April 2011).

50. Knights, “Slippery Slope.”

51. Obama, *Address to the Nation on Libya*.

achieve the objective. It is a policy that results in hoping for success based upon the flawed unproven hypothesis that airpower alone can protect civilians.

The fact that no-fly zones enforced by airpower alone cannot achieve the objective of protecting civilians does not mean that no-fly zones have no use or are ineffective. If no-fly zones are used in conjunction with other military operations or other instruments of power, they could be very useful. No-fly zones are simply ineffective stand-alone operations. No-fly zones are effective at preventing enemy flight operations. They can demonstrate resolve and commitment, especially if this deterrence is backed up with force. Although a no-fly zone cannot prevent the repression of civilians by itself, the establishment of a no-fly zone can enable the presence of a peacekeeping force on the ground. Additionally, when combined with diplomatic and economic pressure, a no-fly zone may be able bring about an end to the conflict and thereby ultimately protect civilians. No-fly zones set the conditions for success; they just cannot achieve these objectives by themselves.

Viewed in this context, the no-fly zone operations in Libya may prove successful, but only as they are used to enable an end to the conflict. It is imperative that leaders and planners do not conclude from past no-fly zone operations, or the current one, that they are low-cost, low-risk operations that can successfully protect civilians by themselves. No-fly zones should be used as part of a wider military operation with clearly defined and achievable objectives. A no-fly zone should be used to set the conditions to either put peacekeeping troops on the ground to protect the civilian population or allow other instruments of national power to bring an end to the conflict. No-fly zones have been successful in the past and they can be used successfully in the future, so long as their capabilities and limitations are fully understood and communicated.

## SELECTED BIBLIOGRAPHY

Arana-Barradas, Louis A. "Keeping Iraq Grounded." *Airman*, November 2000, Vol. 44, Iss. 11, 2-8. <http://proquest.umi.com/> (accessed 3 March 2011).

Benard, Alexander. "Lessons from Iraq and Bosnia on the Theory and Practice of No-fly Zones." *The Journal of Strategic Studies*, September 2004, Vol. 27, Iss. 3, 454-478. <http://web.ebscohost.com/> (accessed 3 March 2011).

Chapman, Suzann. "The War Before the War." *Air Force Magazine*, February 2004, Vol. 87, Iss. 2, 52-57. <http://proquest.umi.com/> (accessed 3 March 2011).

Chivers, C. J. "As Qaddafi's Troops Move In, a Seesaw Battle for a Rebel City." *The New York Times*, 10 April 2011. <http://www.lexisnexis.com/> (accessed 13 April 2011).

Chivers, C. J. and Kareem Fahim. "Libyan Rebels' Convoy Mistakenly Hit by NATO, Rebel General Says." *The New York Times*, 8 April 2011. <http://www.lexisnexis.com/> (accessed 13 April 2011).

Clark, Wesley K. *Waging Modern War*. New York, NY: PublicAffairs, 2001.

Correll, John T. "Northern Watch." *Air Force Magazine*, February 2000, Vol. 83, Iss. 2, 32-28. <http://proquest.umi.com/> (accessed 3 March 2011).

Covault, Craig. "Military Air Operations Grow Over Balkan Crisis." *Aviation Week & Space Technology*, 19 April 1993, Vol. 138, No. 16, 58. <http://www.lexisnexis.com/> (accessed 3 March 2011).

De Nesnera, Andre. "No-Fly Zone Established Over Libya, but Civilian Attacks Continue." *Voice of America News*, 24 March 2011. <http://proquest.umi.com/> (accessed 13 April 2011).

———. "US Military Planners Consider No-Fly Zone Over Libya." *Voice of America News*, 8 March 2011. <http://proquest.umi.com/> (accessed 15 March 2011).

Dreazen, Yochi J. "Pentagon in No Rush for Engagement in Libya." *National Journal*, 2 March 2011. <http://proquest.umi.com/> (accessed 15 March 2011).

Erlanger, Steven. "NATO says hands are tied in air war; Alliance rejects criticism from rebels, citing tactics by Qaddafi and weather." *The International Herald Tribune*, 8 April 2011. <http://www.lexisnexis.com/> (accessed 13 April 2011).

"First AMRAAM Fired in Combat Downs Iraqi MiG in No-Fly Zone." *Aviation Week & Space Technology*, 4 January 1993, Vol. 138, No. 1, 26. <http://www.lexisnexis.com/> (accessed 3 March 2011).

Fahim, Kareem and C. J. Chivers. "NATO Airstrike Reportedly Kills Libyan Rebels in Confusion of Battle Zone." *The New York Times*, 3 April 2011. <http://www.lexisnexis.com/> (accessed 13 April 2011).

Fulghum, David A. "Central Iraq's Air Defenses Reamain as Dense as in 1991." *Aviation Week & Space Technology*, 21 October 2002, Vol. 157, Iss. 17, 27-30. <http://web.ebscohost.com/> (accessed 3 March 2011).

———. "U.S. May Suspend Northern Watch Patrol." *Aviation Week & Space Technology*, 14 May 2001, Vol. 154, Iss. 20, 31-32. <http://web.ebscohost.com/> (accessed 3 March 2011)

Gates, Robert M., United States Secretary of Defense. Address. United States Military Academy, West Point, NY, 25 February 2011. <http://www.defense.gov/> (accessed 2 April 2011).

Gibbons, Phillip. "Policy Watch #632, U.S. No-Fly Zones in Iraq: To What End?" *The Washington Institute for Near East Policy*, 1 July 2002. <http://www.washingtoninstitute.org/> (accessed 3 March 2011).

Huber, Jeff. "Thou Shalt Not Fly." *Proceedings*, August 1999, Vol. 125, Iss. 8, 26-29. <http://proquest.umi.com/> (accessed 3 March 2011).

Jordan, Bryant. "Iraqi Dogfights Occur Only Minutes Apart No One Was Hit." *Air Force Times*, 18 January 1999, 22. <http://proquest.umi.com/> (accessed 3 March 2011).

Keating, Joshua E. "Do No-Fly Zones Work?" *Foreign Policy*, 28 February 2011. <http://www.foreignpolicy.com/> (accessed 15 March 2011).

Khalilzad, Zalmay and Jeremy Shapiro, eds. *Strategic Appraisal: United States Air and Space Power in the 21<sup>st</sup> Century*. Santa Monica, CA: RAND, 2002.

Kitfield, James. "The Libyan Crisis: Grounding No-Fly Talk." *National Journal*, 10 March 2011. <http://proquest.umi.com/> (accessed 15 March 2011).

Kutner, Joshua A. "Desert Fox Forces Withdraw; Iraq Challenges No-Fly Zones." *National Defense*, February 1999, Vol. 83, Iss 545, 6. <http://proquest.umi.com/> (accessed 3 March 2011).

Knights, Michael A. *Cradle of Conflict: Iraq and the Birth of Modern U.S. Military Power*. Annapolis, MD: Naval Institute Press, 2005.

———. "Policy Watch #730, The Long View of No-Fly and No-Augmentation Zones." *The Washington Institute for Near East Policy*, 24 March 2003. <http://www.washingtoninstitute.org/> (accessed 3 March 2011).

———. “Policy Watch #1765, Slippery Slope: Libya and the Lessons of Previous No-Fly Zones.” *The Washington Institute for Near East Policy*, 25 February 2011. <http://www.washingtoninstitute.org/> (accessed 3 March 2011).

———. “Rolling Escalation.” *Defense & Foreign Affairs Strategic Policy*, November 2002, Vol. 30, Iss. 11, 15-18. <http://proquest.umi.com/> (accessed 3 March 2011).

Miller, Kevin P. “UAVs Hold Promise for No-Fly Zone Enforcement.” *Proceedings*, September 2001, Vol. 127, Iss. 9, 38-42. <http://proquest.umi.com/> (accessed 3 March 2011).

“NATO Coordinates Bosnia No-Fly Zone.” *Aviation Week & Space Technology*, 12 April 1993, Vol. 138, No. 15, 63. <http://www.lexisnexis.com/> (accessed 3 March 2011).

“No-Fly Zone in Southern Iraq.” *U.S. Department of State Dispatch*, 31 August 1992, Vol. 3, Iss. 35, 682. <http://proquest.umi.com/> (accessed 3 March 2011).

Obama, Barack H., President of the United States. Address to the Nation on Libya. National Defense University, Washington D.C., 28 March 2011. <http://www.whitehouse.gov/> (accessed 1 April 2011).

Rolfsen, Bruce. “Iraq Claims Plane is Combat Kill.” *Air Force Times*, 10 September 2001, 8. <http://proquest.umi.com/> (accessed 3 March 2011).

Sly, Liz. “Urban combat still rages on forgotten Libyan front.” *The Washington Post*, 29 March 2011. <http://www.lexisnexis.com/> (accessed 13 April 2011).

Tirpak, John A. “Legacy of the Air Blockades.” *Air Force Magazine*, February 2003, Vol. 86, Iss. 2, 46-52. <http://proquest.umi.com/> (accessed 3 March 2011).

United Nations. Security Council. “The Situation in Libya.” S/Res/1973. 2011. <http://www.un.org/documents> (accessed 15 April 2011).

Wolfe, Frank. “CENTCOM Chief: No Pressing Equipment Needs to Combat Iraqi Threat.” *Defense Daily*, 20 September 2000, Vol. 207, Iss. 56, 1. <http://proquest.umi.com/> (accessed 3 March 2011).